United States Department of Agriculture

Marketing and Regulatory Programs

Animal and Plant Health Inspection Service

Addendum to:

Medfly Cooperative Eradication Program, Central Florida, Environmental Assessment, April 1998

For:

Sebring, Florida, July 1998

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Addendum

Introduction

On July 9, 1998, a single, male Medfly was detected in Sebring (Highlands County), Florida. Subsequent detections (over 100 Medflies) have confirmed the presence of an infestation in the area, in commercial grapefruit groves. The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), in cooperation with the Florida Department of Agriculture and Consumer Services (FDACS) have determined that an emergency eradication program is necessary to prevent substantial agricultural and environmental damage from this invasive alien pest species.

The potential environmental impacts of emergency eradication programs, such as this program, have been analyzed in a comprehensive, generic way in a programmatic environmental analysis, the "Medfly Cooperative Eradication Program, Final Environmental Impact Statement–1993." For Central Florida, including the area of the present Sebring infestation, potential environmental impacts were analyzed as recently as April 1998 in a site-specific environmental assessment (EA), the "Medfly Cooperative Eradication Program, Central Florida, Environmental Assessment, April 1998."

This addendum to the April 1998 EA has been prepared to accommodate certain site-specific characteristics of the Sebring area and to report on the status of potential new alternatives for Medfly control. Characteristics of the Sebring area, while not unique when compared to other areas of Central Florida, have been given further consideration in this addendum: the presence of many water bodies and endangered and threatened species (E&T species). The status of two potential new alternatives for Medfly control, SureDye and spinosad, were also considered.

APHIS' authority for cooperation in the program is based upon the Organic Act (7 United States Code (U.S.C.) 147a), which authorizes the Secretary of Agriculture to carry out operations to eradicate insect pests, and the Federal Plant Pest Act (7 U.S.C. 150dd), which authorizes the Secretary of Agriculture to use emergency measures to prevent the dissemination of plant pests new to or not widely distributed throughout the United States.

Site-specific Characteristics

The recent discovery of the Medfly infestation near Sebring made it necessary for APHIS to take a second look at the environmental issues and consequences of the expanded eradication for central Florida. In particular, APHIS considered the presence of large water bodies and E&T species.

There are several large bodies of water in and near the infested area. Lake Jackson and Lake Lotela are located due south and due north of the present infestation, respectively. The Kissimmee River is east of this location. Program managers will employ appropriate buffers to reduce the potential for pesticide drift to all major bodies of water.

This site is part of the central Florida ridge, an area where the nontarget species composition includes many E&T species. Although the species of concern are not expected to be found in any of the infested groves, program actions could affect nearby sites through disturbance of breeding habitats and drift of pesticides. The present infestation is north of Sebring and not adjacent to Highlands Hammock State Park or other critical habitat, but further delimitation of the infestation may include sites close to these habitats. There are some groves adjacent to the park boundaries. The Avon Park Bombing Range covers most of the area northeast of the infestation. Military sites such as this are often habitat for endangered and threatened species also. APHIS is consulting with the U.S. Fish and Wildlife Service (FWS) about protection measures required to prevent adverse effects to endangered and threatened species in this region. The local FWS office at Vero Beach has communicated that the proposed ground applications will not adversely impact any endangered and threatened species in the immediate area. APHIS will continue local consultation to address any issues that relate to expansion of the Medfly infestation or the need to expand or change pesticide applications (increased spatial coverage or need for aerial applications).

Status of Potential New Alternatives

A great deal of attention has been focused on potential new alternatives for Medfly and fruit fly control, especially alternatives that in the future may serve as substitutes for the organophosphate pesticide, malathion. Two of these that APHIS is considering and that are probably the most promising are SureDye and spinosad. SureDye is a photoactive dye that is combined with a bait which is attractive to fruit flies. Once they consume it, the dye becomes activated by sunlight, generating a form of oxygen that is toxic to the insects. Spinosad is a fermentation-derived pesticide, registered for use on cotton, citrus, and leafy vegetables, and considered by EPA to be a "reduced-risk" pesticide. The USDA Agricultural Research Service (ARS) is working with APHIS and many State departments of agriculture to develop and test new control technologies, including SureDye and spinosad.

APHIS analyzed the potential enviromental impacts of the use of SureDye for the control of fruit flies in two risk assessments in 1995. Although SureDye shows great potential for use against fruit flies, it must be registered by the U.S. Environmental Protection Agency (EPA) before it can be used by APHIS and its cooperators in a control program. In response to ARS' request for an experimental use permit (EUP) to test SureDye on coffee, EPA has denied the permit until an adequate registration application package is submitted by the material's manufacturer, PhotoDye. EPA has said there are significant data gaps in the application package relating to product chemistry and acute toxicology, and that the registration (and the EUP) could move forward when the additional data is submitted. The pesticide registration process is costly. APHIS and its State cooperator are prohibited from supporting or funding (discriminating in favor of) a single commercial concern in such endeavors.

APHIS would like to see spinosad tested, but ARS has not yet submitted its request for an EUP. The process will incur delays (Federal Register notices, science reviews, etc.), and even if ARS could submit a complete application immediately, the EPA has advised that it could not approve the permit before August 15, 1998. (APHIS originally intended to perform simultaneous efficacy testing, comparing the effectiveness of bait formulations of malathion, SureDye, and spinosad for the

protection of coffee in Hawaii, but was also denied an EUP for the malathion testing based on the lack of tolerance data for that agricultural product.) In summary, therefore, there were no additional alternatives for the control of Medfly available at the time of detection of the Sebring infestation.

Finding of No Significant Impact
for
Addendum to: Medfly Cooperative Eradication Program
Central Florida (Sebring, Florida)
Environmental Assessment, July 1998

The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), has prepared an addendum to the revised Central Florida Medfly Cooperative Eradication Program environmental assessment (EA) that analyzes alternatives for control of the Mediterranean Fruit fly (Medfly), an exotic pest that has been found in Central Florida. The addendum and EA, incorporated by reference into this document, are available from:

USDA, APHIS, PPQ
Tampa Work Unit
4951-B East Adamo Drive, Suite 220
Tampa, FL 33605

or

USDA, APHIS, PPQ
Program Support
4700 River Road, Unit 134
Riverdale, MD 20737-1236

The EA for this program analyzed alternatives of (1) no action, (2) Medfly suppression (including chemicals), (3) Medfly suppression (without chemicals), (4) Medfly eradication (including chemicals), and (5) Medfly eradication (without chemicals). Each of those alternatives was determined to have potential environmental consequences. APHIS selected Medfly eradication (including chemicals) using an integrated pest management approach for the proposed program because of its capability to achieve eradication in a way that also reduces the magnitude of those potential environmental consequences.

APHIS has prepared a programmatic biological assessment for endangered and threatened species and is currently conducting an emergency consultation with the U.S. Department of the Interior, Fish and Wildlife Service (FWS), with regard to the protection of endangered and threatened species or their critical habitats. APHIS will adhere to protective measures designed specifically for this program and mutually agreed upon with FWS.

I find that implementation of the proposed program will not significantly impact the quality of the human environment. I have considered and base my finding of no significant impact for the incorporated addendum and EA on the quantitative and qualitative risk assessments of the proposed pesticides, review of the program's operational characteristics, and the site-specific aspects of the proposed program's area. In addition, I find that the environmental process undertaken for this program is entirely consistent with the principles of "environmental justice" as expressed in Executive Order No. 12898. Lastly, because I have not found evidence of significant environmental impact associated with this program, I further find that an environmental impact statement does not need to be prepared and that the program may proceed.

/S/
Michael J. Shannon
State Plant Health Director

July 27, 1998
Date